

REMARKS

This is intended as a full and complete response to the Office Action dated June 5, 2006, having a shortened statutory period for response set to expire on September 5, 2006. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-3, 5-14 and 31-37 remain pending in the application and are shown above. Claim 32 has been cancelled by Applicants. Reconsideration of the rejected claims is requested for reasons presented below.

Claim Rejections- 35 U.S.C. § 103

Claims 1-3 and 5-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Fraser* (U.S. 3,517,546).

Despite assuming that the pipeline pig disclosed in *Fraser* passing through the inner diameter of the pipeline constitutes an interaction between the pipeline pig and the inner diameter of the pipeline, the reference, however, states that this interaction produces travel noise or incidental noise which is aimed to be distinguished by the sonic waves in the pipeline and not to be recorded (column 2, lines 14-15 and lines 39-42). Therefore, the interaction according to *Fraser* between the pipeline pig and the inner diameter of the pipeline generates travel noise which does not constitute data representative of an acoustical characteristic of the pipeline. In fact, not recording the travel noise as disclosed in *Fraser* means that the detector does not rely on the noise as being an acoustic characteristic of a pipeline condition but rather detects other acoustics from a leak.

For the same reasons, *Fraser* does not provide selecting pig guide diameter, seal diameter and seal thickness in order to generate vibration frequency data characteristic of an internal condition of the pipeline. According to *Fraser*, the vibration frequency data which are generated are always travel noise regardless of whatever seal diameter or seal thickness are selected. Consequently, the above submitted traversal regarding travel noise applies here with respect to pig selection.

Therefore, *Fraser* fails to teach, show or suggest each and every element of claim 1. Further, Applicants submit that claim 1 is allowable. Accordingly, Applicants respectfully request allowance of claim 1 and any claims that depend therefrom.

Claim Rejections- 35 U.S.C. § 102

Claims 15, 16 and 31-37 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Fraser*.

In view of the aforementioned teachings of *Fraser*, Applicants submit that *Fraser* fails to teach, show or suggest each and every element of claim 15. Specifically, *Fraser* does not teach generating data representative of the frequency response and analyzing the data to give data representative of the condition of the pipeline. Accordingly, Applicants submit that claim 15 is allowable and respectfully request allowance of this claim and any claims that depend therefrom.

Moreover, *Fraser* does not teach analyzing data at "a frequency range between about 75 Hz and 300 Hz" to determine the condition of the pipeline as recited in dependent claim 16. The reference provides band pass amplifiers which pass only the frequencies above 30,000 Hz and substantially rejects frequencies below this level. The band pass amplifiers mechanically do not allow low frequency to pass through and the action thereof cannot be considered to involve any analysis. Therefore, Applicants further traverse the rejection of dependent claim 16 and submit that claim 16 is allowable. Accordingly, Applicants respectfully request allowance thereof.

With respect to Claim 31, *Fraser* does not teach using the vibration to infer a condition of the pipeline. As stated in the reference at column 4, lines 5 and 6, travel noise (*i.e.*, the vibration induced in the portion of the pipeline pig as the pipeline pig passes through the pipeline) is cancelled in the detecting circuit. Therefore, *Fraser* fails to teach, show or suggest each and every element of claim 31. Accordingly, Applicants submit that claim 31 is allowable and respectfully request allowance of claim 31 and any claims that depend therefrom.

PATENT
Atty. Dkt. No. WEAT/0275

Conclusion

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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